#### **REMARKS**

At the outset, Applicants wish to thank the Examiner for the courtesies extended during the July 23, 2007 telephone interview. At that interview, the current rejections were discussed.

Accompanying this Response is a Terminal Disclaimer.

Claims 1-12 are pending in this application. Claims 5 & 6 have been cancelled and their features incorporated into claim 1. Claim 12 has been canceled without prejudice or disclaimer. Claims 2-4, and 7-11 have been amended to address informalities cited by the Examiner, and to put the claims in better form. No new matter has been introduced by these amendments.

## Claim Rejections

# Rejections under 35 USC §112 & 35 U.S.C. §101

A. Response to rejection of claims 2, 7-11, and 13 under 35 U.S.C. §112, second paragraph and 35 U.S.C. §101.

Claims 2, 7-11, and 13 stand rejected under 35 U.S.C. §112, second paragraph. Since claim 12 was mentioned in the section of the Office Action dealing with the §112 rejection, Applicants have assumed that the omission of claim 12 as being rejected under §112, second paragraph, was a typographical error. Applicants earnestly request confirmation of this assumption in the next Office Action.

With respect to claims 2, and 7-11, Applicants have amended the claims to more particularly point out and distinctly claim the present subject matter. With respect to any rejection of claim 12, it has been canceled without prejudice or disclaimer. Reconsideration and withdrawal of the rejection respectfully is requested.

In response to the rejection of claim 13 under 35 U.S.C. §101, Applicants have assumed that the number "13" was a typographical error, since the application currently contains only 12 claims, and that the Examiner intended to reject claim 12 under 35 U.S.C. §101. Applicants earnestly request confirmation of this assumption in the next Office Action.

Since claim 12 has been canceled without prejudice or disclaimer, Applicants respectfully submit that this rejection is moot. Reconsideration and withdrawal of the rejection is respectfully requested.

# Rejections Under 35 U.S.C. § 102 & 103

B Response to rejection of claims 1-7, and 9-12 under 35 U.S.C. §102(b) as being anticipated by Luciani et al.

Claims 1-7, and 9-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,028,149 of Luciani et al. ("Luciani"). Applicants first note that in the rejection under U.S.C. §103(a), the Examiner has acknowledged that Luciani does not expressly teach a nitrogen-containing electron donor and prepolymerization of the Ziegler catalyst. Since these features are recited in claims 6 and 8, respectively, Applicants have assumed that the current listing of rejected claims (1-7, and 9-12) under §102(b) is a typographical error, and that the Examiner intended to reject claims 1-5, 7 and 9-12 under 102(b). Applicants earnestly request confirmation of this assumption in the next Office Action.

In any event, Applicants respectfully submit that the reference does not teach all the elements of the current claims.

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

In the current claims, Applicants have incorporated the limitations of claims 5 & 6 into claim 1, and therefore respectfully submit that the reference does not teach all the limitations of the claims. Reconsideration and withdrawal of the rejection respectfully is requested.

# C. Response to rejection of claims 7 and 9 under 35 U.S.C. §103(a) as being unpatentable over Luciani et al. in view of Bailly et al.

Claims 7 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,028,149 of Luciani et al. ("Luciani") in view of U.S. Patent No. 5,075,396 of Bailly et al. ("Bailly"). As discussed above, Applicants believe that the listing of claims 7 and 9 as rejected under §103 is a typographical error and that Examiner intended the rejected claims to be claims 6 and 8. Further, Bailly et al. corresponds to U.S. Patent No. 5,208,109, as per the PTO-892 form attached to the Office Action, not to U.S. Patent No. 5,075,396 of Kashiwa et al ("Kashiwa"), so that Applicants have assumed that the citation of Kashiwa was a typographical error. Therefore, Applicants will address Bailly, not Kashiwa in this Response. Applicants earnestly request confirmation of this assumption in the next Office Action. In any event, Applicants submit that a *prima facie* case of Obviousness has not been made out by the Examiner.

With respect to a rejection under §103, in order to establish a *prima facie* case of Obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (C.C.P.A. 1970).

First, the Examiner has acknowledged that Luciani does not expressly teach a nitrogen-containing electron donor and pre-polymerization of the Ziegler catalyst. However, in addition, the current claims recite bringing an <u>inorganic metal oxide</u> into contact with <u>titanium</u> tetrachloride. Luciani does not specifically teach the use of titanium tetrachloride as in the present claims. Rather, at most it teaches it's use as an <u>optional</u> component along with a silylated silica support <u>with a solution of Mg-halide or Mg-alkyl-halide or a mixture of both and Ti-alkoxide or Ti-halogen-alkoxide or a mixture of both.</u> (col. 1, lines 60-63) Luciani's examples illustrate contacting steps involving only <u>α-Mg-dichloride and Ti-tetrabutoxide</u>.

In fact, Luciani <u>teaches away</u> from step A) of the current claims, where an inorganic metal oxide is brought into contact with <u>titanium tetrachloride</u>, in that it specifically criticizes the use of titanium chloride as in the present claims:

It has to be underlined that the use of Ti-tetra-chloride instead of Ti-alkoxide or Ti-halogen-alkoxide does not permit to achieve a good catalyst component (Comparative example D). (col. 3, lines 57-60)

Bailly does not cure the deficiencies of Luciani. Bailly relates to a <u>process for polymerizing</u> or <u>copolymerizing</u> alpha-olefins in the gas phase by means of a fluidized bed. One objective of Bailly is to obtain polymers or copolymers of alpha-olefins having a variety of properties and having <u>very low contents of inorganic residues</u>. (col. 2, lines 48-50) However, since both the present claims and Luciani employ inorganic oxides, the reference teaches away from both:

It is also known that one can introduce the catalyst into the fluidized-bed reactor in association with an inorganic granular support. This inorganic granular support generally consists of refractory oxides such as alumina, silica, aluminum silicate or magnesium oxide....Unfortunately, the polymers or copolymers obtained in this way have comparatively high contents of inorganic residues and this has an adverse effect on their properties. (col. 1, line 56 to col. 2, line 8)

Moreover, while the Examiner has relied upon Bailly for limitations related to the donor used in the current process claims, the passage cited by the Examiner simply mentions that the electron donor compound used in the reaction can include "at least one atom of oxygen, sulphur, nitrogen and/or phosphorus." In particular, an aliphatic ether oxide is mentioned. (col. 3, line 65 to col. 4, line 5). Therefore, Bailly teaches the use of several classes of donors, one of which is nitrogen-containing, in a catalyst component completely different than that of the present claims. There is thus no teaching or suggestion to use a nitrogen-containing donor as in the present process steps.

Therefore, for the above reasons, a *prima facie* case of Obviousness have not been made out by the Examiner. Reconsideration and withdrawal of the rejection respectfully is requested.

### **Double Patenting Rejection**

D. <u>Response to Provisional Rejection of claims 1-12 on the grounds of nonstatutory obviousness-type double patenting.</u>

In response to the Provisional Rejection of claims 1-12 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/553,230, Applicants include with this response a Terminal Disclaimer. Reconsideration and withdrawal of the rejection respectfully are requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicant's attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 30, 2007.

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